REMARKS

Applicants gratefully acknowledge the Examiner's acceptance of the drawings filed on November 30, 2005 (Office Action Summary mailed February 24, 2006).

Because Applicants are uncertain whether the amendments to the claims and specification submitted with Amendment (B), filed on November 30, 2005, were entered, Applicants re-submit the amendments herewith. For ease of reference, also re-submit the Remarks below as filed with Amendment (B). **Please note that arguments new to this response begin on page 10**, addressing the obviousness-type double patenting over co-pending Application No. 10/884,917.

The Specification is amended to address the informalities identified by the Examiner.

Claims 7 is amended to address the Examiner's objection and to incorporate the subject matter of claim 8, which is cancelled. Claims 10, 12, 14, 16, 18, and 20 are cancelled because the above amendment makes them redundant.

The claims are also amended to address the rejections under § 112, second paragraph.

The present amendment adds no new matter to the application.

The Rejections

Claims 8-20 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

Claims 7 and 8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ohmi et al. (EP 0 622 667 A1) [hereinafter "Ohmi '667"] in view of Hishikari et al. (JP 63-138220) [hereinafter "Hishikari"].

Claims 9-18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ohmi '667 in view of Hishikari, and further in view of Nelson (U.S. Patent 3,180,404).

Claims 19 and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ohmi '667 in view of Hishikari, and further in view of Asanuma et al. (U.S. Patent 4,369,838) [hereinafter "Asanuma"].

Claims 7 and 8 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-12 of co-pending Application No. 09/905,209 (now U.S. Patent 6,919,056).

Claims 7 and 8 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 3-13 of co-pending Application No. 10/884,917 [hereinafter "the '917 Application"] in view of Hishikari.

Claims 9-18 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims over 3-13 of the co-pending '917 Application in view of Hishikari, and further in view of Nelson

In view of the present amendment, Applicants respectfully traverse the present rejections and request reconsideration and allowance of the remaining claims for the following reasons.

Applicant's Arguments

Rejections Under 35 U.S.C. § 112

Regarding the rejections of claims 8-12, 19, and 20 under 35 U.S.C. § 112, Applicants believe that the present amendment fully addresses the rejections. Regarding the rejections of claims 13-18 under § 112, Applicants believe that the terms "axially symmetrical" and "centrally symmetrical" are clear from the specification. Namely, "axial symmetry" is described in the specification as "a concentric arrangement of heat dissipation fins" (p. 17, lines 26-27). "Centrally symmetrical" is described in the specification on page 13, lines 8-12 with regard to Fig. 9. For these reasons, Applicants respectfully traverse all of the rejections under § 112.

Rejections Under 35 U.S.C. § 103

Ohmi '667 Is Not Available as Prior Art under § 103

Applicants note that the present application and Ohmi '667 were commonly owned by, or subject to an obligation of assignment to, Fujikin, Inc. and Tadahiro Ohmi at the time the invention was made (see Assignment in present case with a recordation date of July 13, 2001, and section (71) of Ohmi '667). Therefore, in accordance with 35 U.S.C. § 103(c) and MPEP 706.02(l)(2), Applicants have provided sufficient evidence to establish that, because both the present application and Ohmi '667 were commonly owned at the time the invention was made, Ohmi '667 cannot be used as prior art against the present claims under 35 U.S.C. § 103.

Even if Ohmi '667 Were Available, No Prima Facie Obviousness Exists

Further regarding the rejection of claims 7 and 8 under 35 U.S.C. § 103(a) as unpatentable over Ohmi '667 in view of Hishikari, even if Ohmi '667 were available to combine as prior art, which it is not, there is no *prima facie* case of obviousness. As

admitted by the Examiner (Office Action dated June 30, 2005, page 5, lines 9-13), Ohmi '667 does not teach a "fin base plates attached to the outside walls of the first and second components" with "a plurality of fins disposed on the fin base plates" as disclosed in claim 7 as amended. Also as admitted by the Examiner (Office Action dated June 30, 2005, page 5, lines 9-13), Ohmi '667 fails to teach "a heater, having an outside, disposed on the outside wall of the second component; and a heater pressing plate, having an outside, disposed on the outside of the heater, wherein the fin base plate is attached to the outside of the heater pressing plate" as disclosed in claim 7 as amended. Hishikari teaches an electronic cooling element (5) to cool a soaking plate (2) through a heater (4), held together with a holding member (6) having a radiation fin (7) on the back. The fin (7) in Hishikari acts to increase the cooling performance of the electronic cooling element (5) which is a Peltier device, and does not serve to cool a reactor chamber.

The Examiner has not identified any motivation to combine the cited references. The combination of Ohmi '667 with Hishikari is not a "duplication of part[s]" as described by the Examiner (Office Action dated June 30, 2005, page 6, line 8), and rings of impermissible hindsight. See W.L. Gore & Assocs., Inc. v. Garlock, Inc. 220 U.S.P.Q. 303, 312 (Fed. Cir. 1983) ("claims were used as a frame, and individual, naked parts of the separate prior art references were employed as a mosaic").

Where claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under § 103 requires that (1) the prior art must suggest to those of ordinary skill in the art that they should perform the invention; and (2) the prior art must have revealed a reasonable expectation of success in performing the invention. In re Vaeck, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure. Noelle v. Lederman, 355 F.3d 1343, 1352 (Fed. Cir. 2004). The relied-upon references do not meet this burden: the references do not suggest the proposed combination and the references do not suggest that such a combination would work. In particular, one of ordinary skill in the art would not expect that the fin of Hishikari could substitute for the activateable cooling unit taught by Ohmi '667. The Examiner has cited that Ohmi '667 teaches "a cooling unit will be activated," but a fin is a passive radiator and so cannot be activated. One of ordinary skill in the art would neither (1) be inclined to substitute a fin for

an activateable cooler; nor (2) expect that the device would operate properly with such a substitution.

Because the art rejections all rely on the combination of Ohmi '667 with Hishikari under 35 U.S.C. § 103, and (1) under 35 U.S.C. § 103(c) Ohmi '667 is not available as prior and (2) there is no motivation to combine these references, Applicants respectfully traverse the rejections under § 103 and request reconsideration and withdrawal of same.

Rejection Under Judicially-Created Doctrine of Obviousness-Type Double Patenting

Courts have held that double patenting rejections require an analysis of the claims and not the disclosure of the patents whose claims are relied upon to demonstrate double patenting. General Foods Corp. v. Studiengesellschaft Kohle mbH, 23 U.S.P.Q.2d 1839, 1846 (Fed. Cir. 1992). In the present case, the Examiner has not established a prima facie case of obviousness-type double patenting because the Examiner has not compared the claims of the asserted references to the claims of the present application. To facilitate prosecution, Applicants provide such a comparison below for each asserted reference, wherein *only the most prominent differences* between the claims are pointed out.

Obviousness-type Double Patenting Rejection Over Application No. 09/905,209

Table 1 compares claim 1 of cited Application No. 09/905,209 (now U.S. Patent 6,919,056) to the closest claim in the present application, namely claim 7 .

Table 1

Appln. No. 09/905,209 (Pat. 6,919,056)	**The present Application**
1. A reactor for generating moisture, comprising:	7. A reactor for generating moisture,
a reactor shell with an inlet side and an outlet side, said reactor shell comprising:	having an inlet side and an outlet side, comprising:
a reactor structural component on the inlet side; and **[Note: does not recite an outside wall]**	a first reactor structural component on the inlet side of the reactor having an outside wall
a reactor structural component on the outlet side; **[Note: does not recite an outside wall]**	a second reactor structural component on the outlet side of the reactor having an outside wall

Appln. No. 09/905,209 (Pat. 6,919,056)	The present Application
wherein an interior space is formed with said reactor structural component on the inlet side and said reactor structural component on the outlet side disposed opposite each other and joined together by welding;	wherein the first and second components are mated to form a reactor shell having an interior space; **[Note: does not recite joined together by welding or disposed opposite each other]**
a gas feed port engaged with said reactor structural component on the inlet side;	a material gas supply passage provided in the first reactor structural component disposed to supply material gases into the interior space; a material gas supply joint connected to the material gas supply passage;
a moisture gas take-out port engaged with said reactor structural component on the outlet side;	a moisture gas outlet passage provided in the second reactor structural component to lead out moisture from the interior space; a moisture gas take-out joint connected to the moisture gas outlet passage;
NOT PRESENT	fin base plates attached to the outside walls of the first and second components;
NOT PRESENT	a plurality of fins disposed on the fin base plates;
NOT PRESENT	a heater, having an outside, disposed on the outside wall of the second component; and
NOT PRESENT	a heater pressing plate, having an outside, disposed on the outside of the heater, wherein the fin base plate is attached to the outside of the heater pressing plate.
an inlet reflector disposed on the inside wall of said reactor structural component on the inlet side, positioned opposite to said gas feed port in the interior space of the reactor;	**NOT PRESENT**
an outlet reflector disposed on the inside wall of the said reactor structural component on the outlet side, positioned opposite to said moisture gas take-out port in the interior space of the said reactor; and	**NOT PRESENT**
a platinum coat catalyst layer formed on the inside wall of said reactor structural component on the outlet side;	**NOT PRESENT**
wherein hydrogen and oxygen are fed into the interior space of said reactor through said gas feed port and brought into contact with said platinum coat catalyst layer to activate the reactivity of the hydrogen and oxygen, thereby reacting hydrogen and oxygen into water in a non-combustion state; wherein	**NOT PRESENT**

Appln. No. 09/905,209 (Pat. 6,919,056)	The present Application
a round recession with a flat bottom is formed on inside walls of said reactor structural component on the inlet side and said reactor structural component on the outlet side; wherein there is a tapered portion formed at peripheral edge portions of said inlet reflector facing the inside wall of said reactor structural component on the inlet side and said outlet reflector facing the inside wall of said reactor structural component on the outlet side; and wherein a gap is formed between said inlet reflector and the inside wall of said reactor structural component on the inlet side, and a gap is formed between said outlet reflector and the inside wall of said reactor structural component on the outlet side, and	**NOT PRESENT**
wherein there is no filter in the interior space.	**NOT PRESENT**

Because there are multiple differences and mutually exclusive and missing elements between the claims of the present application and the claims of Application No. 09/905,209 (now U.S. Patent 6,919,056), no prima facie case of obviousness-type double patenting has been shown. General Foods, 23 U.S.P.Q.2d at 1846. Clearly, the Examiner has not shown that the same invention has been claimed twice.

Therefore, we believe that the Examiner's present obviousness-type double patenting rejections over Application No. 09/905,209 (now U.S. Patent 6,919,056) are untenable, and respectfully request reconsideration and withdrawal thereof.

Obviousness-type Double Patenting Rejection Over Application No. 10/884,917 and other references

Table 2 compares claim 3 of cited Application No. 10/884,917 to the closest claim in the present application, namely claim 7 .

Table 2

Appln. No. 10/884,917	The present Application
3. A reactor for generating moisture, comprising:	7. A reactor for generating moisture,
	having an inlet side and an outlet side, comprising:

Appln. No. 10/884,917	The present Application
a reactor structural component on the inlet side; and **[Note: does not recite an outside wall]**	a first reactor structural component on the inlet side of the reactor having an outside wall
a reactor structural component on the outlet side; **[Note: does not recite an outside wall]**	a second reactor structural component on the outlet side of the reactor having an outside wall
wherein an interior space is formed with said reactor structural component on the inlet side and said reactor structural component on the outlet side disposed opposite to each other and joined together by welding;	wherein the first and second components are mated to form a reactor shell having an interior space; **[Note: does not recite joined together by welding or disposed opposite each other]**
a gas feed port engaged with said reactor structural component on the inlet side;	a material gas supply passage provided in the first reactor structural component disposed to supply material gases into the interior space; a material gas supply joint connected to the material gas supply passage;
a moisture gas take-out port engaged with said reactor structural component on the outlet side;	a moisture gas outlet passage provided in the second reactor structural component to lead out moisture from the interior space; a moisture gas take-out joint connected to the moisture gas outlet passage;
NOT PRESENT (Examiner alleges taught by Hishikari)	fin base plates attached to the outside walls of the first and second components;
NOT PRESENT (Examiner alleges taught by Hishikari)	a plurality of fins disposed on the fin base plates;
NOT PRESENT (Examiner alleges taught by Hishikari)	a heater, having an outside, disposed on the outside wall of the second component; and
NOT PRESENT (Examiner alleges taught by Hishikari)	a heater pressing plate, having an outside, disposed on the outside of the heater, wherein the fin base plate is attached to the outside of the heater pressing plate.
a reflector positioned opposite said gas feed port and said moisture gas take-out port in the interior space of said reactor; and	**NOT PRESENT**
a platinum coat catalyst layer formed on the inside wall of said reactor structural component on the outlet side	**NOT PRESENT**

Appln. No. 10/884,917	The present Application
wherein hydrogen and oxygen are fed into the interior space of said reactor through said gas feed port and brought into contact with said platinum coat catalyst layer to activate the reactivity of the hydrogen and oxygen, thereby reacting the hydrogen and oxygen into water in a non-combustion state;	**NOT PRESENT**
a round recession with a flat bottom is formed on inside walls of said reactor structural component on the inlet side and said reactor structural component on the outlet side; wherein the outside diameter of said reflector is slightly smaller than the inside diameter of the recession;	**NOT PRESENT**
wherein a taper is formed on the peripheral edge portion of said reflector on the side facing said reactor structural component on the outlet side; and wherein a gap is formed between said reflector and the inside wall of said reactor structural component on the outlet side	**NOT PRESENT**
wherein there is no filter in the interior space.	**NOT PRESENT**

The Examiner acknowledges that the '917 application is silent as to the structure of the fins and heater as claimed here (Office Action dated June 3, 2005, page 12, lines 9-10) but asserts that Hishikari teaches such a structure. However, even if Hishikari taught the fins and heater as presently claimed (which it does not, as discussed above), and even if a motivation to combine the reference existed (which it does not), no prima facie case of obviousness-type double patenting has been shown because there remains multiple differences and mutually exclusive and missing elements between the claims of the present application and the claims of the '917 Application even if modified as argued by the Examiner. General Foods, 23 U.S.P.Q.2d at 1846. Clearly, the Examiner has not shown that the same invention has been claimed twice.

Therefore, we believe that the Examiner's present obviousness-type double patenting rejections based on the '917 Application are untenable, and respectfully request reconsideration and withdrawal thereof.

Conclusion

For all of the above reasons, claims 7, 9, 11, 13, 15, 17, and 19 are now in condition for allowance. Therefore, Applicants respectfully request reconsideration of the application and withdrawal of the rejections, and a prompt notice of allowance is earnestly solicited.

Questions are welcomed by the below signed attorney for the Applicants.

Respectfully submitted,

GRIFFIN & SZIPL, P.C.

Joerg-Uwe Szipl
Registration No. 31,799

GRIFFIN & SZIPL, P.C.
Suite PH-1
2300 Ninth Street, South
Arlington, VA 22204

Telephone: (703) 979-5700
Facsimile: (703) 979-7429
Email: GandS@szipl.com
Customer No.: 24203